



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,506	08/13/2007	Kustaa Nyholm	PLA078-239902	1031
54942	7590	04/29/2010		
Cozen O'Connor 277 PARK AVENUE 20th Floor NEW YORK, NY 10172			EXAMINER COBANOGU, DILEK B	
			ART UNIT 3626	PAPER NUMBER
			NOTIFICATION DATE 04/29/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pto@cozen.com
ggress@cozen.com

Office Action Summary

Application No.

10/599,506

Applicant(s)

NYHOLM, KUSTAA

Examiner

DILEK B. COBANOGU

Art Unit

3626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/GS/GS)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Paper No(s)/Mail Date _____
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-28 have been examined.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Finland on 04/02/2004.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 15, 21, 26, 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 15 recites plurality of items from the drawings for actions of receiving and storing information. It is unclear in the claim that how the actions are done by different devices and also actions are done for different devices represented as the same. In particular, claim 15 recites a predetermined event is identified (2-1, 3-1, 4-2, 4-5, 4-9), where 2-1 means identifying instrument X (sterilizer), sterilising instrument X; 3-1 means identifying instrument X (dental unit); 4-2 means identifying use of instrument X; 4-5 means identifying material package Y; 4-9 means showing an approval/warning, performing filling.
6. Claims 21, 26, 28 also have similar deficiencies, and are also unclear.
7. Claims 16-22 incorporate the deficiencies of claim 15, through dependency, and are also rejected.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-4, 6-17, 19-28 are rejected under 35 U.S.C. 102(e) as being unpatentable by Beier et al. (hereinafter Beier) (U.S. Patent No. 7,258,546 B2).

A. As per claim 1, Beier discloses Data arrangement for dental-care environment, which comprises at least one dental-care-related device (U, T) and a data system (S), wherein

i. a data transmission communication has been arranged between the dental-care-related device (U, T) and the data system (S) (Beier; col. 2, lines 34-67); and

ii. the dental-care-related device (U, T) (Beier; col. 2, lines 34-67) comprises

(1) means for identifying a predetermined event (Beier; col. 9, lines 30-53),

(2) means for transmitting information related to said event to the data system (S) as a response to identifying the predetermined event (Beier; col. 9, line 30 to col. 10, line 3), and

(3) means for storing said information in the data system (S) item-specifically (Beier; col. 9, line 30 to col. 10, line 3).

B. As per claim 2, Beier discloses Arrangement according to claim 1, wherein the predetermined event is a treatment event the target of which being a patient; and the means for storing have been arranged to store information related to the event patient-specifically (Beier; col. 3, line 61 to col. 4, line 4, col. 4, lines 25-32, col. 9, lines 30-53).

C. As per claim 3, Beier discloses Arrangement according to claim 1, wherein the predetermined event is a treatment event, the target of which being certain tooth and/or certain tooth surface of a patient (Beier; col. 1, lines 13-25, col. 9, lines 30-53). Examiner considers that "dental related instrument" for used for working a human body could be related to a certain tooth, or certain tooth surface of a patient.

D. As per claim 4, Beier discloses Arrangement according to claim 1, wherein the predetermined event is related to dental-care instruments (X) (Beier; col. 3, lines 1-25); and the means for storing have been arranged to store said information instrument-specifically (Beier; col. 4, lines 25-32, col. 9, lines 30-53).

E. As per claim 6, Beier discloses Arrangement according to claim 1, wherein the dental-care-related device (U, T) comprises means for receiving information related to a predetermined event (Beier; col. 6, lines 48-67).

F. As per claim 7, Beier discloses Arrangement according to claim 1, wherein the data system (S) is configured for identifying an unsterilised, unsuitable for the

treatment event in question or otherwise unfit instrument (X); and as a response to said identification, indicating before use of the instrument that it is not suitable for use (Beier; col. 4, lines 34-43).

G. As per claim 8, Beier discloses Arrangement according to claim 1, wherein the dental-care-related device is a dental unit (U) and/or a sterilisation device (T) of dental-care instruments (Beier; col. 2, lines 34-67).

H. As per claim 9, Beier discloses Arrangement according to claim 1, wherein the information related to the predetermined event comprises **at least one of the following data**: data of the type of dental-care instrument (X) (Beier; col. 2, lines 34-67), identification data of the dental-care instrument (X), maintenance status data of the dental-care instrument (X), sterilisation status data of the dental-care instrument (X), point of time of sterilisation of the dental-care instrument (X), data of connecting the dental-care instrument (X) to the dental unit (U), data of taking the dental-care instrument (X) to use in connection with a treatment event, data of the point of time the dental-care instrument (X) was taken to use, data of operation parameter values of the dental-care instrument (X) during the dental treatment event comprising data of operation time, rotation speed and/or power used, data of disconnecting the dental-care instrument (X) from the dental unit (U), data of disconnection time of the dental-care instrument (X) from the dental unit (U), data of starting and ending the sterilisation treatment of the dental-care instrument (X), data of the starting and ending times of the sterilisation treatment of the dental-care instrument (X), data of material (Y) to be used in the treatment,

identification data of the package of material (Y), data of the point of time of arrival of the material package (Y) to the clinic, identification data of the manufacturing lot of the material package (Y), data of used-by date of the material package (Y), data of opening the material package (Y), data of the point of time of opening the material package (Y), data of the point of time of use of material (Y), data of the amount of material (Y) used, data of the treatment plan of the patient, data of performing a certain treatment procedure, data of the point of time of performance of a certain treatment procedure.

I. As per claim 10, Beier discloses Arrangement according to claim 1, wherein the means for identifying the predetermined event comprise an electronic reader device (Beier; col. 3, lines 26-40, col. 7, lines 6-12).

J. As per claim 11, Beier discloses Arrangement according to claim 10, wherein the electronic reader device is a radio frequency tag (RFT) reader (Beier; col. 3, lines 26-40, col. 4, lines 44-48).

K. As per claim 12, Beier discloses Arrangement according to claim 10, wherein the electronic reader device is a barcode reader (Beier; col. 3, lines 26-40).

L. As per claim 13, Beier discloses Arrangement according to claim 1, wherein the data system (S) comprising also a user interface and display means connected with it (Beier; col. 7, lines 1-5); and the data system (S) is configured for transmitting to the display means information stored in the data system (S) and/or messages based on said information (Beier; col. 9, lines 30-53).

M. As per claim 14, Beier discloses Arrangement according to claim 1, wherein the data system is configured for transmitting to the dental-care-related device (U, T) control data relating to the treatment plan and/or instruments; and the dental-care-related device (U, T) has been arranged to be controlled according to said control data as a response to receiving control data (Beier; col. 4, lines 33-48).

N. As per claim 15, Beier discloses Method for maintaining an electronic dental-care register for a dental-care environment in a data arrangement, the dental-care environment comprising at least one dental-care-related device (U, T) and a data system (S), wherein

- i. a data transmission communication is formed between the dental-care-related device (U, T) and the data system (S) (Beier; col. 9, line 54 to col. 10, line 3);
- ii. a predetermined event is identified (2-1, 3-1, 4-2, 4-5, 4-9) in the dental-care-related device (U, T) (Beier; col. 9, lines 30-53);
- iii. information related to the identified event is sent (2-2, 3-5, 4-3, 4-6, 4-10) from the dental-care-related device (U, T) to the data system (S) (Beier; col. 9, line 30 to col. 10, line 3);
- iv. said information is received (2-3, 3-6, 4-4, 4-7, 4-11) in the data system (S) (Beier; col. 9, line 30 to col. 10, line 3); and
- v. said information is stored (2-3, 3-6, 4-4, 4-7, 4-11) in the data system (S) item-specifically (Beier; col. 9, line 30 to col. 10, line 3).

- O. As per claim 16, Beier discloses Method according to claim 15, wherein the predetermined event is targeted to a patient (Beier; col. 9, lines 30-53), a patient's tooth and/or its certain surface; and the information related to the event is stored patient-specifically (Beier; col. 3, line 61 to col. 4, line 4).
- P. As per claim 17, Beier discloses Method according to claim 15, wherein the predetermined event is addressed to a treatment instrument (X); and the information related to the event is stored instrument-specifically (Beier; col. 3, line 61 to col. 4, line 4, col. 11, lines 40-57).
- Q. As per claim 19, Beier discloses Method according to claim 15, wherein
- i. an individual instrument is identified (Beier; col. 2, lines 34-67, col. 4, lines 33-43);
 - ii. identification data is compared with the treatment plan of the patient who is the object of the treatment procedure and/or with the status data of the individual instrument in question; it is detected if instrument (X) is unsterilised or does not correspond the treatment plan (Beier; col. 2, lines 34-67, col. 4, lines 33-43); and
 - iii. the said detection is expressed (5-6) as a response to detecting an unsterilised instrument or an instrument not corresponding the treatment plan (Beier; col. 2, lines 34-67, col. 4, lines 33-43).
- R. As per claim 20, Beier discloses Method according to claim 15, wherein information related to the predetermined event is stored in the patient database

and/or stock control database of the dental clinic data system (S) (Beier; col. 3, lines 1-25).

- S. As per claim 21, Beier discloses Method according to claim 15, wherein
- i. taking an instrument to use is identified as a predetermined event (Beier; col. 2, lines 34-67);
 - ii. as a response to identifying taking the instrument in use, data of taking the instrument to use is transmitted and stored (5-2) in the data system instrument-specifically and patient-specifically (Beier; col. 2, lines 34-67, col. 9, line 30 to col. 10, line 3),
 - iii. taking material in use is identified as a predetermined event (Beier; col. 2, lines 34-67, col. 9, line 30 to col. 10, line 3);
 - iv. as a response to identifying taking the material in use, data of taking the material to use is transmitted and stored (5-18) in the data system material-specifically and patient-specifically (Beier; col. 2, lines 34-67, col. 9, line 30 to col. 10, line 3),
 - v. a performed dental procedure is identified as a predetermined event (Beier; col. 2, lines 34-67, col. 9, line 30 to col. 10, line 3); and
 - vi. as a response to identifying the performed dental procedure, data of the performed dental procedure is transmitted and stored (5-15, 5-20) in the data system patient-specifically (Beier; col. 2, lines 34-67, col. 9, line 30 to col. 10, line 3).
- T. As per claim 22, Beier discloses Method according to claim 15, wherein

- i. instrument sterilisation data is maintained instrument-specifically in the data system (Beier; col. 2, lines 34-67, col. 10, lines 20-62);
 - ii. instrument sterilisation data is checked (5-4) before taking an instrument to use (Beier; col. 4, lines 33-43, col. 10, lines 20-62);
 - iii. data of patient treatment plan is maintained in the data system (Beier; col. 2, lines 34-67, col. 9, lines 30-53);
 - iv. the treatment plan data of a patient is verified before commencing treatment procedures (Beier; col. 2, lines 34-67, col. 9, lines 30-53);
 - v. material data is maintained in the data system (Beier; col. 2, lines 34-67, col. 9, lines 30-53);
 - vi. material data is checked before taking material to use (Beier; col. 2, lines 34-67, col. 9, lines 30-53).
- U. As per claim 23, Beier discloses Dental-care-related device for performing dental-care events in a dental-care environment, wherein it comprises
- i. means for forming a data transmission communication with a data system (S) for the dental-care environment (Beier; col. 9, line 30 to col. 10, line 3);
 - ii. means for identifying a predetermined event (Beier; col. 9, line 30 to col. 10, line 3); and
 - iii. means for transmitting information related to the identified event to the data system (S) (Beier; col. 9, line 30 to col. 10, line 3).

V. As per claim 24, Beier discloses Dental-care-related device according to claim 23, wherein it is a dental unit (U) (Beier; col. 1, lines 13-25, col. 2, lines 34-67).

W. As per claims 25-28, they are article of manufacture claims, which repeat the same limitations of claim 15, the corresponding method claim, as a collection of executable instructions stored on machine readable media as opposed to a series of process steps. Since the teachings of Beier disclose the underlying process steps that constitute the method of claim 15, it is respectfully submitted that they likewise disclose the executable instructions that perform the steps as well. As such, the limitations of claims 25-28, are rejected for the same reasons given above for claim 15.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beier et al. (hereinafter Beier) (U.S. Patent No. 7,258,546 B2).

A. As per claims 5 and 18, Beier discloses Arrangement and method according to claim 1 and 15, wherein the predetermined event is related to dental-care materials (Y) and/or their packages (Beier; col. 3, lines 1-25); and the

means for storing have been arranged to store said information material-specifically.

Beier does not specifically disclose "storing information on material specifically", however this feature is well known in the inventory and computer arts. It would have been a matter of simple addition of storing information which relates to the operation of the instrument, the patients to be treated and the treatment of the instrument (Beier; col. 9, lines 30-53. Thus, the simple addition of one known element for another producing a predictable result renders the claim obvious.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not used prior art teach Method and apparatus for cleaning and sterilizing a dental apparatus US 5807521 A, Integrated system for powered surgical tools US 6017354 A, Method and device for the automatic identification of components of medical apparatus systems US 6092722 A, System for carrying out sterilization of equipment US 6117285 A, Dental device and method for controlling same US 6506050 B1.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DILEK B. COBANOGU whose telephone number is (571)272-8295. The examiner can normally be reached on 8-4:30.

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry O'Connor can be reached on 571-272-6787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3626

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dilek B Cobanoglu/
Examiner, Art Unit 3626
4/24/2010